

REMARKS

The claims are 4 and 8-21.

The Examiner, in the Office Action dated April 20, 2004, has maintained the rejection to claim 4 under 35 U.S.C. §102(e) as being anticipated by Pedrizetti, et. al., U.S. Patent No. 6,151,708 ("Pedrizetti.")

As the Examiner has noted, Pedrizetti transmits a bitmap table. That table "simply contains a list of "1" (high) or "0" (low) bits in certain table locations," (Col. 5, lines 28-33.) A yes or no bit ("1" or "0") is set high or low according to the presence of a hash on the server machine. As the Examiner also noted, in agreement with Applicant, there is no hash sent from a server to client.

Where the Examiner, with all due respect, is incorrect, however, is in asserting that Pedrizetti transmits a bitmap table that is actually a hash table. Pedrizetti does not transmit a bitmap table that is a hash table. All that Pedrizetti transmits is a bitmap table containing a list of "1" (high) or "0" (low) bits in certain table locations:

Digressing for a moment, FIG. 4 shows one possible embodiment for a table entry in the a hash table 400 stored on the client and the server. Recall that the client's local sparse hash table simply contains a list of "1" (high) or "0" (low) bits in certain table locations, and that the server contains a corresponding table of bit entries, some of which have associated update data. Each position in the table 400 corresponds to a different hash value. For example, shown is a bit 402 set high (e.g. equal to 1) indicating an update is available for some component that hashes to value 8443. Thus the possible availability of an update for a software or hardware component is indicated by a single bit transmitted in the bitmap table sent to the client computer.

(Col. 5, lines 27-34.)

Thus, with all due respect, the Examiner is wrong that any hash table is sent between client and server. What is sent is a bitmap table. That bitmap table is then compared to a client side bitmap table.

The use of the words "hash table" in Pedrizetti are not as the Examiner would have them, either. At Col. 4, lines 53-58 Pedrizetti states:

Instead, as discussed below, the server maintains a large bit field having bit entries which indicate the potential availability of updates. This bit field is compressed and transferred to the client, allowing the client to **locally determine a correspondence** between the client's list and the server's bit field. **The correspondence between modules and upgrades is by a hash function which maps unique module references to index positions within the field (a hash table).**

(emphasis added)

In other words, *and on the local client side*, the server's bitmap table is decompressed and compared to the client's bitmap table. That is, there is no hash table transmitted between client and server. Rather a hash table is created, through a client function, and on the client side, to map high and low bits of a bitmap table into something meaningful – the presence of a module reference.

The Examiner has also cited Col. 1, lines 45-49 of Pedrizetti as support for the assertion that Pedrizetti transmits a hash table. But all the cited language does is describe how a hash function is first used at the server to construct a bitmap table, which table is then transmitted to the client. The client then makes its own table and compares it to the server's received table, precisely as was described above.

It is submitted that the Examiner, therefore, is incorrect in asserting that Pedrizetti discloses transferred a hash table for a server to client. Pedrizetti apparently does create

a hash table on the client side, which it uses to create a client side bitmap table, which it then uses to compare to server side bitmap table, but it does not and cannot be fairly read as sending a hash table from client to server.

Applicant further submits the Examiner is incorrect in asserting that a transmitted hash table is checked or compared with hash values determined at a target. There is no comparison because there is no transmitted hash table. All that is transmitted in Pedrizetti, as was noted above, is a bitmap table, with bits either set to 1 or 0 depending upon the presence of a hash on the server machine.

Thus, and unlike the limitations of claim 4, Pedrizetti neither transmits a hash, nor compares a hash with a target.

Thus, it is submitted that the limitations of claim 4 are not met by the Pedrizetti reference, and it is respectfully requested that the Examiner's rejection be withdrawn and the claim proceed to issue.

Claim 8 is similar to claim 4 and Applicant respectfully traverses the Examiner's rejection to claim 8, under 35 U.S.C. §102(e), as being anticipated by Pedrizetti.

As Applicant noted above, Pedrizetti fails to teach, suggest or disclose transmitting a hash, unlike the limitations of claim 8: "...transmitting a hash of data information from a first distribution media to said target; [and] comparing said hash in order to determine if data information should be transmitted to said target..." Thus, it is submitted, Pedrizetti cannot serve as anticipatory reference to claim 8, and it is respectfully requested that the Examiner's rejection be withdrawn and the claim proceed to issue.

Claims 9-20 depend, directly or indirectly, from claim 8 and therefore share the

limitations of that claim. Applicant respectfully traverses the Examiner's rejection under 35 U.S.C. 102 §(e) as being anticipated by Pedrizetti to claims 9-20. As was noted above, Pedrizetti nowhere, teaches, suggests nor discloses the limitations of claim 8, and so cannot be held to disclose the limitations of claims 9-20. Thus, it is submitted, Pedrizetti cannot serve as anticipatory reference to claims 9-20, and it is respectfully requested that the Examiner's rejection be withdrawn and the claim proceed to issue.

Applicant respectfully traverses the Examiner's rejection under 35 U.S.C. §102(e) to claim 21 as being anticipated by Pedrizetti. Claim 21 comprises the limitations of: "...transmitting said hash of data information to said target; [and] comparing said hash in order to determine if data information should be transmitted to said target..." As was noted above with regard to the Pedrizetti reference, it nowhere teaches, suggests or discloses transmitting a hash to a target. Thus, it is submitted, Pedrizetti cannot serve as anticipatory reference to claim 21, and it is respectfully requested that the Examiner's rejection be withdrawn and the claim proceed to issue.

Applicant further traverses the Examiner's rejections to claims 16 and 17 under 35 U.S.C. §102(b) as being anticipated by Aviani, U.S. Patent No. 5,950,205. Applicant notes that Aviani nowhere teaches, suggests nor discloses the limitations of independent claim 8 and therefore cannot, it is submitted serve as an anticipatory reference for dependant claims 16 and 17.

Aviani discloses a cache file system. Disk drives within the system may store either meta data or hashes. But there is no teaching, suggestion nor disclosure of transmitting any hashes or data information, as in claim 8. Thus, it is submitted, Aviani cannot serve as anticipatory reference to claims 16 and 17, and it is respectfully requested

that the Examiner's rejection be withdrawn and the claim proceed to issue.

Conclusion

Claims 4 and 8-21 define patentable subject matter over the art of record and are not anticipated by nor obvious in view of the references of record. A Notice of Allowance is respectfully solicited.

Respectfully Submitted,



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